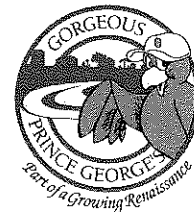


Jack B. Johnson
County Executive

THE PRINCE GEORGE'S COUNTY GOVERNMENT

OFFICE OF THE COUNTY EXECUTIVE



August 9, 2010

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

Re: WT Docket 96-86
WT Docket 06-150
PS Docket No. 06-229

Dear Ms. Dortch:

In accordance with Section 1.1206(b)(1) of the Commission's Rules, Prince George's County (County) submits this written ex parte filing in the above-captioned proceedings. Speculation has appeared in press reports going back to the spring of this year regarding reported discussions within the Commission relative to the possibility of changes in the 700 MHz narrowband voice bandplan¹ that would provide "flexibility" in the use of this spectrum. The County was extremely concerned with these media reports and contacted both regulatory and legislative personnel (see Attachment 1) to articulate the critical need for the 700 MHz narrowband voice channels² used to support the new \$80,000,000 public safety communications system serving the County's first responders. The fundamental spectrum used for the County system is found within the 700 MHz narrowband voice channels³. As noted in Attachment 1, Vernon R. Herron, Director, Office of Homeland Security wrote to the Commissioners to articulate specific issues of concern if the press reports had any merit.

At the National Public Safety Telecommunications Council ("NPSTC") meeting on June 14th, two items relative to the concept of so-called 700 MHz bandplan "flexibility" were shared with the attendees. In one announcement, it was noted that a committee of Congress is assessing the issues associated with the potential re-use of the 700 MHz narrowband voice channels⁴ for broadband technology, including in at least one draft, permitted secondary use of public safety

frequencies by commercial carriers. Subsequently, a representative of the Public Safety and Homeland Security Bureau (the "Bureau") was kind enough to speak to attendees and provide

¹ See 47 CFR §90.531

² See 47 CFR §90.531(b)(6)

³ See WQJS917, WQJS918, WQJU812, WQJU814

⁴ *Id.*

some general information describing the possibility of a study by the Bureau to assess issues related to future "flexibility" of the 700 MHz spectrum including the narrowband voice channels.

As noted in the County's attached May 10th correspondence to Commissioner McDowell, the County appreciates the role of the FCC in spectral management. The County also recognizes the importance of the President's call for an additional 500 MHz of spectrum⁵ to be made available for wireless mobile broadband use throughout the United States. Through the leadership of the President in recently identifying even more spectrum for commercial users, the County urges the Commission not to make any changes in the 700 MHz narrowband voice channel allotments that permit broadband use on these frequencies. Like virtually all of the major public safety communications organizations as well as large governments, the County believes that additional public safety spectrum for broadband should come through the reallocation of the D Block for dedicated first responder support, not the re-use of critical 700 MHz voice channels.

Without the 700 MHz narrowband voice channels, it would have been impossible for the County to join the other jurisdictions within the National Capital Region ("NCR"), as well as the County's non-NCR neighbors, in the achievement of interoperable first responder communications. In the planning of the County's new system, the County engaged the services of one of America's leading public safety consulting firms as well as a recognized provider of first responder communications equipment. Both the County's consultant and equipment supplier independently evaluated options for deployment of a new public safety communications system for the County in the 800 MHz frequency band. At the end of the study process, both separately concluded that an insufficient number of 800 MHz frequencies would be available to the County and that even a significant number of those frequencies would be limited to secondary operations⁶.

Fortuitously, the Commission's approval of the Region 20 Plan⁷ for 700 MHz⁸ and the digital television transition on June 12, 2009, resulted in the actual availability of a sufficient quantity of 700 MHz channels for the County's public safety communications system. This system is being fully deployed and radio operations for law enforcement have been virtually flawless. The County anticipates no significant system challenges when fire/EMS users also migrate to the new radio system later in the summer. This system, which meets every requirement of Subpart R including spectrum efficiency⁹ now, through the use of time division multiple access ("TDMA") technology, will support approximately six thousand first responder devices including state, county, and municipal public safety personnel.

⁵ See Presidential Memorandum: Unleashing the Wireless Broadband Revolution, June 28, 2010 at www.whitehouse.gov

⁶ See 47 CFR §90.7

⁷ The creation of the Region 20 Plan for 700 MHz was so critical to the County, that Prince George's financially supported the work that led to its approval by the Commission.

⁸ See DA 08-1730

⁹ See 47 CFR §90.535

In January of 2007, the Department of Homeland Security ("DHS") conducted a "Report Card"¹⁰ of major cities in the United States relative to their progress in achieving interoperability. While the NCR area received high marks overall, the Report noted that Prince George's could not interoperate with any of our neighbors.

Technology Overview

The NCR UA has 25 separate communications systems in the area servicing public safety agencies in the District of Columbia, northern Virginia, and Maryland. The District of Columbia Fire and Emergency Medical Services, all of the suburban northern Virginia, and Maryland public safety agencies (except those in Prince George's County, Maryland) are using separate but interconnected 800 MHz Motorola SmartZone™ systems. Regional interoperability is primarily achieved through the use of shared systems, fixed gateways, shared channels, talk groups, and cached radios. The fixed gateways interconnect the NCR Police Mutual Aid Radio System, the Fire Mutual Aid Radio System, and National Public Safety Policy Advisory Committee channels (known locally as the regional Interoperability Network System). Mobile gateways are only used on an incident-specific basis.

The NCR UA anticipates migrating existing radio systems to a Project 25 (P25)-compliant system in the near future. Alexandria and Arlington, Virginia, are expected to upgrade their existing systems to become P25-compliant, and a new P25-compliant radio network will be deployed in Prince George's County, Maryland. Other jurisdictions in the NCR UA will have to make similar upgrades in order to ensure effective communications are maintained throughout the area.

As noted in the DHS Report, the County was building a new state-of-the-art P25 communications system. Without the 700 MHz narrowband voice frequencies to support this new P25 system, our 850,000 citizens would continue to be served by first responders operating with out-of-date technology and unable to easily interoperate with fellow public safety personnel in surrounding jurisdictions. Should the Commission amend its rules to reallocate the 700 MHz narrowband voice spectrum to some other purpose, the men and women serving our citizens as first responders would be devastated by the loss of this modern communications system.

The County's belief is that the Commission recognizes that in spectrum congested areas, such as the NCR, it would be impractical to eliminate a frequency band desperately needed to support first responder communications. The 700 MHz frequency band shares a characteristic common in other bands. Where it is needed, in congested areas like the Mid-Atlantic, the frequencies are needed greatly. Conversely, just like the 800 MHz public safety spectrum, there are parts of the United States in which spectrum use in either band is minimal. As a corollary, this is true in other services, spectrum bands, and technologies. The 500+ MHz of spectrum already available to commercial carriers is more heavily used in metropolitan areas than rural areas and therefore the demand for another 500 MHz of commercial spectrum will be also location dependent. In addition, 294 MHz of spectrum that remains reserved for television broadcasting is used sporadically depending upon the population density of the area in which broadcasting services are being rendered. If there are locations in the country that do not need the 700 MHz voice spectrum for state, regional, or local radio services, the spectrum isn't needed for broadband either. The result would be a severe diminishment in the nation's homeland security communications plan with no practical benefit for broadband expansion.

¹⁰ See Tactical Interoperable Communications Scorecards Summary Report and Findings, January 2007

The County understands the Commission's need to maximize the efficiency of the finite spectrum available for a wide variety of purposes. Similarly, the County appreciates the fact that through the President's leadership on this issue, the federal government is also reallocating spectrum for other purposes. Accordingly, it may be tempting for the Commission to study and propose the concept of flexible spectrum use with the 700 MHz public safety narrowband voice channels. However, the County believes that such a strategy would be both unwise and take public safety and homeland security communications backwards. Beyond meeting the state, regional, and local communications needs for public safety first responders, the 700 MHz narrowband voice frequencies serve a unique national purpose that is critical to our homeland security communications response capabilities.

This special nationwide role for 700 MHz was first envisioned by the National Coordinating Committee ("NCC"). Among the recommendations of the NCC, the Commission was advised to require¹¹:

- A standard channel nomenclature table for all interoperability channels.
- A requirement that all radios which are equipped with displays and are capable of operating on any of the interoperability channels, must use the standard channel nomenclature, above, in their displays; and must have, at a minimum, the capability of displaying eight alphanumeric characters.
- Updating the Rules concerning the ANSI/TIA/EIA standard incorporated by reference in Section 90.548 of the Rules to include the revised document, ANSI/TIA/EIA 102.BAAA-A

These partial requirements adopted by the NCC were predicated upon the belief that first responders should be able to go to any place within the United States following a disaster and immediately interoperate with their fellow public safety personnel over a set of common 700 MHz interoperability voice and data frequencies. There are only a small number of such frequencies in the VHF, UHF, and 800 MHz bands. However, in the 700 MHz narrowband voice spectrum, the Commission very wisely established a much greater number of special interoperability frequencies to be available nationwide:

- A. Thirty-two unique P25 frequency pairs for nationwide interoperability¹²
- B. Nine low-power 12.5 KHz frequency pairs¹³ for on-scene communications and incident area networks as recommended by SAFECOM
- C. Three 12.5 KHz low-power frequency pairs for nationwide itinerant use¹⁴
- D. Eight secondary trunking channels^{15 16}

¹¹ See Ex Parte letter of Kathleen M.H. Wallman submitted to the Honorable Michael Powell, FCC Chairman on July 25, 2005.

¹² See 47 CFR §90.531(b)(1)

¹³ See 47 CFR §90.531(b)(3)

¹⁴ See 47 CFR §90.531(b)(4)

It is not coincidence that the Commission laid out the permitted uses of the voice channels in Subpart 531 by listing the nationwide interoperability channels first. In the Commission's First Report relative to Docket WT 96-86, it was stated that "Interoperability signifies the crowning achievement of this proceeding."¹⁷ The Commission also stated, "The First Report and Third Notice provides a structure to: (1) enable the development of a **national interoperability plan** (emphasis supplied)"¹⁸. The Commission continued by stating, "We believe that this (700 MHz) band plan strikes an appropriate balance between the standardization necessary to achieve nationwide interoperability"¹⁹ and "Within our band plan, we designate approximately 10 percent of the 700 MHz public safety spectrum for nationwide interoperable communications"²⁰.

Without a doubt, it could not be clearer that the Commission intended strong support for public safety operations in the 700 MHz band with the unique purpose of fostering nationwide interoperability. While the more recent programs of the Commission relative to broadband also are vitally and appropriately concerned with interoperable broadband communications on a national basis, the First Report recognized the very practical "real world" fact that the first communications established at a scene of a public safety incident are voice communications. This was articulated when the First Report stated, "The Commission observed that interoperability must often be established during emergencies and under conditions that allow little opportunity for prior planning; that communications must often be established among numerous smaller groups, each with its own talk group; and that, once responders are on the scene, mutual aid interoperability usually involves the use of portable radios"²¹. All of these observations relate to 700 MHz voice operations on a nationwide basis and they remain valid today.

In recognition of the fact that initial communications will be with voice use to establish initial command and control, the Commission also stated, "We will require that 700 MHz band public safety equipment, when operating on the interoperability channels, be designed to use digital modulation as its primary modulation mode. We will allow mobile and portable units to have analog modulation capability, but only as a secondary mode in addition to its primary digital mode"²². The Commission was clearly concerned with voice operations for interoperability. Even with the march of required broadband technology, voice use in 700 MHz continues to be an essential public safety communications component and critical to establishing initial command and control at the scene of an emergency.

¹⁵ See 47 CFR §90.531(b)(7)

¹⁶ See National Public Safety Telecommunications Petition for Rule Making submitted on March 19, 2010

¹⁷ See WT 96-86 First Report and Order at paragraph 7

¹⁸ See WT 96-86 First Report and Order at paragraph 5

¹⁹ See WT 96-86 First Report and Order at paragraph 6

²⁰ See WT 96-86 First Report and Order at paragraph 7

²¹ See WT 96-86 First Report and Order at paragraph 74

²² See WT 96-86 First Report and Order at paragraph 110

There are no other frequency bands within the land mobile spectrum used by public safety for voice operations where such a wide number of nationwide interoperability channel resources are found. These 700 MHz narrowband voice channels are not only unique, they are critical to the country's homeland security program and the National Emergency Communications Plan²³ ("NECP"). Yet even with these spectral resources, which far exceed any interoperability resources in other bands, the public safety communications community has identified other potential requirements to utilize the 700 MHz narrowband voice channels further.

Beyond the practical operational issues articulated in this Ex Parte, consideration must be given to border issues between the United States, Canada, and Mexico. As was noted in a presentation at the last NPSTC meeting in Alexandria on June 14²⁴, there are locations on our northern border where both the Commission and Industry Canada have authorized cross-border radio operations for American and Canadian public safety and homeland security personnel. Texas, New Mexico, Arizona, and California are all challenged not only by 800 MHz rebanding, but incremental use of 700 MHz as permitted by treaty. Any changes to the bandplan could have serious unintended ramifications negatively affecting homeland security and public safety interoperability operations in the 700 MHz band.

With the unfortunate potential of another terrorist attack on the nation's capital or a weather catastrophe such as experienced last winter with back-to-back multi-foot snowfalls throughout the NCR, the County believes that these frequencies must be preserved on a nationwide basis for public safety and first responder operations. The County has programmed all of its 700 MHz mobile and portable radios with the 700 MHz nationwide interoperability frequencies. The County is prepared to send first responders to any point within the United States and interoperate on these frequencies without any delays for in-field radio re-programming. While the County prays that there are no further disasters in the NCR, the County desires that all nationwide first responders similarly have the ability to come to Prince George's and immediately interoperate here and render coordinated aid and emergency services to our citizens without delay. For this reason, among many others, the County strongly believes that it would be inadvisable for the Commission to permit the use of broadband operations on 700 MHz narrowband voice frequencies in some areas while preserving spectrum for voice in other areas of the United States. Because no one can predict the location of a national disaster requiring extraordinary first responder resources, the country needs a bandplan that preserves the rich 700 MHz nationwide interoperability voice channels for public safety voice operations without limitation.

NPSTC has submitted multiple Petitions for Rule Making seeking further clarifications relative to the use of 700 MHz narrowband voice channels. Pursuant to the recommendations of the

²³ See National Emergency Communications Plan released by the United States Department of Homeland Security, July 2008; "Initiative 7.3: Leverage existing and emerging technologies to expand and integrate disaster communications capabilities among emergency response providers. Deployable communications technologies can provide robust voice, video, and data capabilities for agencies requiring communications during disasters.

²⁴ Presentation of Terry LaValley at NPSTC on June 15, 2010

NCC and the Department of Homeland Security's NECP, both NPSTC and APCO have achieved the certification of the American National Standards Institute ("ANSI") for nationwide unique "common channel" names for all interoperability frequencies including those in the 700 MHz band²⁵. NPSTC has also submitted other petitions relative to the 700 MHz nationwide narrowband voice channels to modify certain applications including the re-designation of a nationwide 700 MHz calling channel²⁶, utilization of reserve channels for tactical purposes, and modification of other interoperability channels to permit secondary aircraft operations which would be unique in the 700 and 800 MHz frequency bands²⁷.

In summary, the County understands and appreciates the need of the Commission to maximize spectrum to its highest and best purpose. The County also believes that 700 MHz spectrum designated for narrowband public safety systems fit those criteria as it is essential to protect the life and safety of the public throughout the nation. Therefore, the County urges the Commission to maintain the 700 MHz narrowband channels for purposes consistent with statewide, regional, and local public safety voice communications as well as the unique nationwide interoperability homeland security voice purposes through which these precious resources serve our country's first responders and the public they protect.

The County's sense is that this issue of 700 MHz narrowband voice "flexibility" has been raised principally because of the D Block controversy now being debated within the public safety communications community. With respect to the D Block, the County has studied the Commission's White Paper on Capacity²⁸ as well as the response of NPSTC²⁹ (and inferentially Andrew Seybold). The County recognizes that there are differences of opinion relative to the views of the Commission which are opposed by almost every public safety communications organization. With all due respect to the writings of many learned persons, the County supports the positions expressed by NPSTC as reflective of the vast majority of public safety communications organizations and Part 90 licensees. Even if there is a scintilla of doubt as to the appropriate strategy for the D Block, the County strongly supports the transfer of this spectrum and believes that the Commission should defer to public safety.

If the D Block spectrum is lost, public safety broadband will be crippled by inadequate spectral capacity and higher future operating costs for the County and its first responders. Arguments suggesting an easy migration to the commercial spectrum when roaming is required are unproven and subject first responders in a best case scenario of competing with the commercial users for spectrum at the very time in which Prince George's first responders need it most. It has also been suggested that "if" public safety can document the need for more spectrum, frequencies can be found in other bands. Such a strategy would greatly increase the cost of

²⁵ See Notice of the National Public Safety Telecommunications Council, June 17, 2010

²⁶ See Petition for Rule Making from the National Public Safety Telecommunications Council, February 8, 2008

²⁷ *Id.*

²⁸ *The Public Safety Nationwide Interoperable Broadband Network: A New Model for Capacity, Performance and Cost* issued by the Commission on June 15, 2010

²⁹ National Public Safety Telecommunications Council Ex Parte dated July 2, 2010

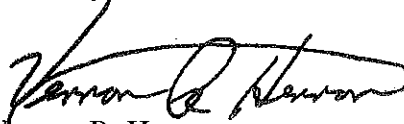
communications infrastructure and result in the kind of spectrum balkanization for which the Commission has criticized public safety in past Orders³⁰. Conversely, supporting a transfer of the D Block from the auction process to public safety would have the very beneficial results of increasing capacity for broadband and minimizing long-term deployment and operating costs.

The recommendations of Prince George's County relative to 700 MHz and the many questions surrounding this spectrum are simple:

- A. Do not permit broadband operations in the narrowband voice channel spectrum of the 700 MHz frequency band.
- B. Recognize public safety's requirements and reallocate the D Block from the commercial auction to public safety for broadband communications.

On behalf of the citizens of Prince George's County, we thank the Commission for permitting the County to submit this Ex Parte statement. If the Commission's staff has any questions regarding this filing, please contact Mr. Wayne A. McBride, Deputy Director for Public Safety Communications at (240) 832-0715.

Sincerely,



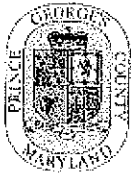
Vernon R. Herron

Deputy Chief Administrative Officer for
Public Safety/Director of Homeland Security

³⁰ See Docket WT 96-86 Second Report and Order at paragraph 484, "We find that permitting individual public safety entities to construct their own networks using this spectrum without such approval would lead to the same balkanization problems of existing public safety spectrum use that we seek to avoid here"

Marlene H. Dortch
August 9, 2010
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Attachment 1



Jack B. Johnson
County Executive

THE PRINCE GEORGE'S COUNTY GOVERNMENT
OFFICE OF THE COUNTY EXECUTIVE



May 10, 2010

The Honorable Robert M. McDowell
Commissioner
Federal Communications Commission
445 12th Street S.W., Room 8-C302
Washington, D.C. 20554

Dear Commissioner McDowell:

A recent press report stated that you had expressed concerns regarding the use of the 700 MHz frequency band for narrowband voice use¹. As the Deputy Chief Administrative Officer for Public Safety/Homeland Security, I would like to share with you the critical importance of the 700 MHz frequency band for the first responders of our County.

Several years ago, Prince George's County embarked upon a major program to upgrade the public safety communications system from the non-interoperable outdated technology system used by law enforcement and Fire/EMS for many years, to a new digital trunked radio system. The new system would provide interoperability with our National Capital Region and neighboring Maryland first responder partners. At the inception of our efforts, it became clear that sufficient spectrum for a new system in the 800 MHz frequency band was virtually non-existent in the Washington Metropolitan area. To construct a system that would meet the needs of Prince George's County, 700 MHz represented not only a preferred option; but the only spectral resource available. Without this frequency band, the County would have been unable to construct a modern interoperable public safety radio system.

Prince George's County recognizes and supports the programs of the Federal Communications Commission to effectively and efficiently manage the nation's finite radio spectrum. We know, on a first hand basis, how precious this resource is to our public safety partners throughout the National Capital Region as well as the State of Maryland. While we applaud your efforts to utilize spectrum to its best and highest purpose, please be assured that narrowband voice use of the 700 MHz spectrum is absolutely essential to the men and women providing public safety services in Prince George's County.

On behalf of our first responders, I would invite you, the other Commissioners, and your staff to visit Prince George's County and see on a first hand basis our new digital trunked radio system operating in the 700 MHz frequency band. This P25 based digital trunked

¹ See Urgent Communications Magazine, March 30, 2010, "Keep in mind that Congress, in 1997 — well before 2001, Sept. 11 — set aside 24 MHz of the 700 MHz block," he said. "That is sitting there. That is wonderful spectrum that should be used for something other than narrowband voice."

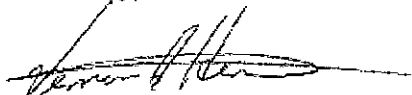
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communications system is fully compliant with the Commission's rules² for spectral efficiency including the requirement for 6.25 KHz operation through the use of time division multiple access technology. While it represents the most contemporary technology available to public safety, it is entirely dependent upon the use of the narrowband voice channels found in the 700 MHz frequency band.

Our hope is that you find this information helpful as the Commission considers the important issues of spectrum management. Should you have any questions, or require additional information, please contact Wayne McBride, Operations Manager, Office of Homeland Security Mobile Technology Center on 301-306-5663.

Sincerely,



Vernon R. Herron
Deputy Chief Administrative Officer for
Public Safety/Director of Homeland Security

² See 47 CFR §90.535(d)